



**Institute of Experimental Botany
of the Czech Academy of Sciences**

The Director's Monthly

March 2026

Foreword



Dear colleagues,

at first glance, this might look like a pirate edition of The Director's Monthly. However, I was simply asked to write the foreword. I don't know exactly when this issue will reach your hands or screens, but it certainly looks like spring is already beginning outside—the sun is warm, the birds are singing—and, as we all know, that's the perfect time to write grant applications!

So, to start off, I wish you plenty of inspiration, strength, focus, and strong nerves—and for many of us, mental resilience after the results are announced. But a scientist's life isn't all about GAČR, so keep an eye out for other grant agencies and calls as well—and don't forget to send abstracts to the IEB Board.

I believe most of you are aware of the Board's existence, but occasionally someone manages to surprise us. Given my role on the Board, I would like to advocate for its continued existence. Although the latest amendment to the Act on Public Research Institutions significantly limited its executive role and strengthened the role of the director, the Board still reviews a number of important documents and project proposals, evaluates laboratories

annually and discusses their future direction, deliberates on the institute's budget, and approves investments and internal documents.

Recently, we have reflected on the international evaluation that took place at the end of last year and resulted in organizational changes. We are also addressing the fate of the journals published by the institute and seeking ways to save them. Details about the Board's activities can be found on the intranet in the meeting reports.

The term of the current Board is coming to an end. I would therefore like to invite you to participate in the election of the new Board, which will take place this fall. I would like to make a personal remark here. It's not that I feel threatened in the presence of the other ten male members, but our Board would certainly benefit from better gender balance. So, ladies, don't be afraid to run!

I wish you a wonderful and successful spring.

Lenka Burketová, Chair of the IEB Board

CONGRATULATIONS and ACKNOWLEDGEMENTS

Aleš Pečinka from the genomics center has become a co-investigator on a European grant from the Marie Skłodowska-Curie Actions program. The project, titled [AGILE](#), will train doctoral students in quantitative techniques of microscopic imaging used in plant biology.

We congratulate **Martin Kovačik** from the genomics center on receiving the prestigious **Fulbright Fellowship**. Martin has already departed for the U.S., where he will study the genetic and epigenetic processes governing [early barley seed development](#) in Mary Ghering's laboratory at the Whitehead Institute. He will focus primarily on so-called genomic imprinting, in which certain genes are activated only from the maternal or paternal copy, and on its role in the formation of the seed endosperm.

Kateřina Holušová, Jitka Ortmannová, Michal Daněk, and Jaroslav Nisler have received **internal grants** to support their research. The aim of these grants is to enable selected unsuccessful applicants for GA ČR and NAZV grants to continue their ongoing research, thereby helping them improve the quality of their next grant application.

Congratulations to **Alena Náprstková** from the Laboratory of Pollen Biology, who successfully defended her doctoral thesis at the Faculty of Science, Charles University. Her thesis focused on the role of ALBA proteins in pollen.



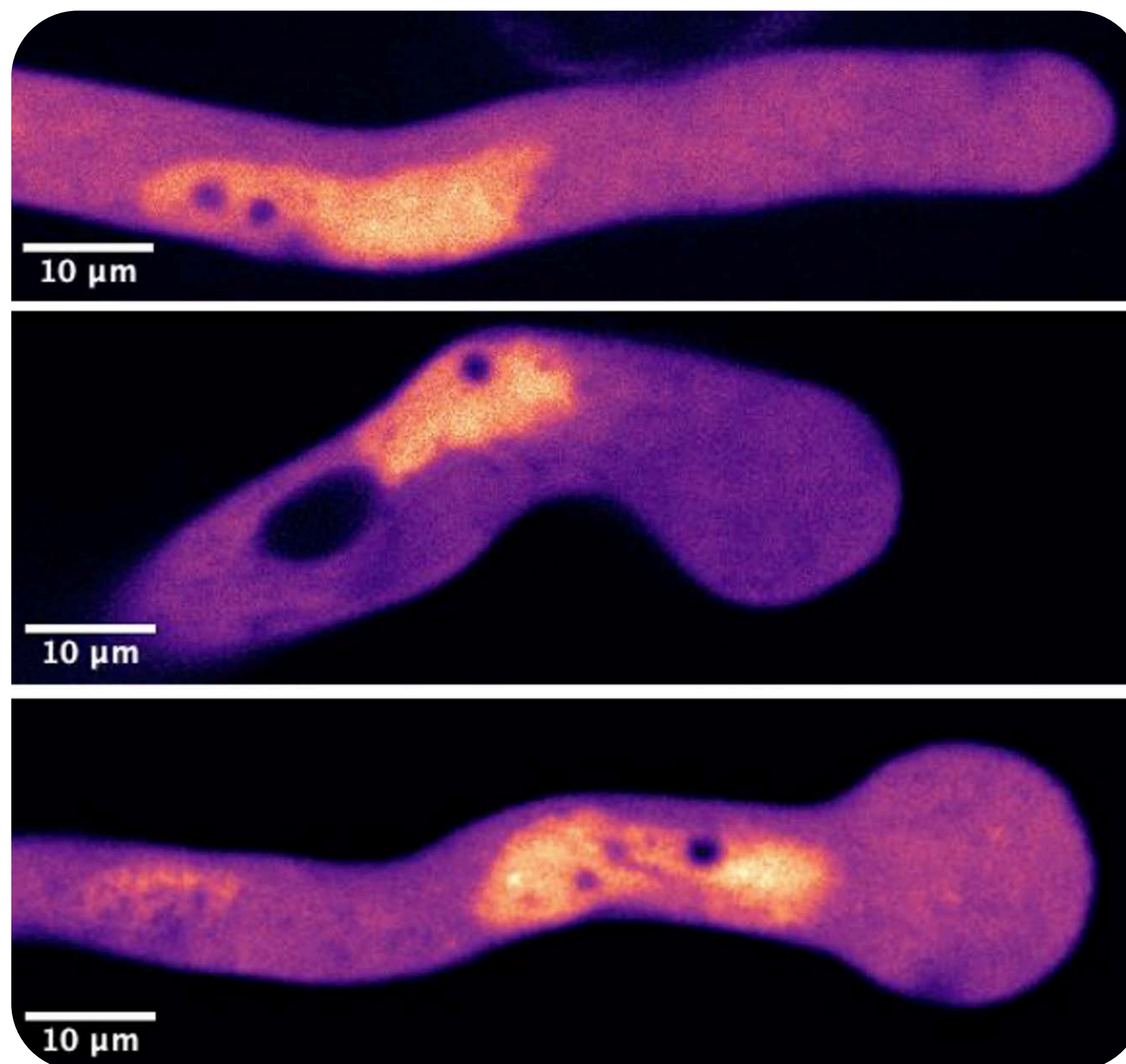
Martin Kovačik at the Olomouc laboratory before leaving for the U.S.

Notable Publications

Researchers from the Laboratory of Pollen Biology, in collaboration with French colleagues, studied the role of the eIF3E protein in pollen tubes. They discovered that this protein maintains the optimal rate of pollen tube elongation—in a unique way, using genetic “switches” that control protein production. The results were published in *The Plant Cell*.

The authors from our institute were **Vinod Kumar** (first author of the article), **David Honys**, and **Said Hafidh** (corresponding author).

[\(Domain architecture of plant eukaryotic translation initiation factor 3 subunit E governs interaction with translational cis-elements to regulate pollen tube growth\)](#)



Top: A normally growing pollen tube containing a fully functional eIF3E protein. When the researchers replaced specific amino acids essential for the protein's function with others, the tubes stopped elongating and their tips swelled (middle and bottom). Source: authors of the article, CC BY 4.0 license.

Notable Publications

Researchers from our genomics center, together with colleagues from Masaryk University, studied the protein Condensin II, which plays a role in the condensation and decondensation of chromosomes during the cell cycle. They found that in *Arabidopsis*, the proper function of Condensin II is also important for DNA resistance to damage.

The article published in *Plant Physiology* was co-authored by **Jovanka Vladejić** and **Klára Procházková** (shared first authors), **Eva Dvořák Tomaščíková**, **Zynke de Cock**, **Kateřina Kaduchová**, **Jana Pokorná**, **Markéta Pavlíková**, and **Aleš Pečinka** (corresponding author).

[\(Condensin II mediates resistance to genotoxic stress and prevents mitotic defects in Arabidopsis\)](#)

Another publication with a dominant contribution from the genomics center describes how wild sorghum specifically removes so-called B chromosomes—redundant parts of genetic information—during embryo development. The study in *Genome Biology* offers a new perspective on genome stability as well as on how chromosomes can influence the processes that determine their fate.

The research team included **Tereza Bojdová** (first author of the article), **Lucie Hloušková**, **Kateřina Holušová**, **Radim Svačina**, **Eva Hřibová**, **Iva Ilíková**, **Roman Pleskot**, **Jan Bartoš**, and **Miroslava Karafiátová** (two corresponding authors) from the IEB.

[\(Sorghum embryos undergoing B chromosome elimination express B-variants of mitotic-related genes\)](#)

News from the IEB

News from the Czech Academy of Sciences

The Academia publishing house releases a series of brochures titled [Science Around Us](#) (*in Czech*). You can write the next brochure yourself—and **use it to present your research to the public** in greater detail than on the institute’s website or in press releases. If this opportunity interests you, please contact our Communications and PR Office, where they will be happy to assist you.

Last year, the CAS established the position of [ombudsman](#), which was filled by Dana Plavcová. Institute employees can turn to her “with concerns regarding discrimination, bullying, violence, harassment, disrespectful behavior, gender-based violence and harassment, and abuse of power,” she says in an [interview](#) on the CAS website.

The Center of Administration and Operations of the Czech Academy of Sciences has published a new [brochure outlining the services](#) it offers to institutes and researchers –ranging from IT support to conference organization (*in Czech*).

HR Award

A questionnaire survey was conducted among employees at the beginning of the year. We would like to thank all 209 respondents for their time and willingness to participate. The goal was to gather opinions on topics based on the European Charter for Researchers and to obtain a basis for analyzing the current situation at the IEB.

A working group composed of researchers and administrative representatives was also established. Its task is to share experiences and provide feedback on the outputs prepared by the HR Award administrators. If you would like to join the working group, please contact Leona Pejcharová.

At the same time, a smaller steering group has been formed, consisting mainly of representatives from the institute’s management, which evaluates the HR Award process outputs in light of the institute’s strategy and approves them for submission to the European Commission. The final submission is scheduled for **June 2026**.

Tokens for articles

When publishing your articles and paying for them, you may have come across the term “tokens”. These are essentially vouchers for **free publication** with certain publishers. The institute has a limited number of these available and uses them for corresponding-author articles in journals ranked in the top decile or quartile according to AIS. Detailed rules for their use can now be found [on the intranet](#).

Conferences and Professional Events

[The 6th B Chromosome Conference](#), an international conference on B chromosomes and similar genetic elements, will take place on 1–4 June in Olomouc. The deadline for registration and abstract submission is **15 April**.

The European conference on **research security**, [ENCORS](#), will be held in Delft, the Netherlands, on 26–27 May. Professor David Honys from the IEB is organizing two sessions there. The first concerns the important and timely topic of partner due diligence, while the second covers the issue of collaboration between research institutions and intelligence services.

Our institute is the main organizer of the conference “[3COST. Cultivating connections: Interdisciplinary insights from Recrop, Diversicrop, and Pangeos](#)”, which is scheduled for 4–6 May in Prague. This is a joint conference of three related COST actions in the field of **sustainable agriculture and biodiversity conservation** in the era of climate change.

The annual **meeting of young scientists** from our institute, the IEB Young Researcher Meeting, will take place this year on 20–22 April in Hrubá Voda. [Registration](#) is open **until 31 March**. For more information, please contact the organizers Pavel Hladík, Tereza Miksteinová, and [Jakub Lemberk](#).

The genomics center is co-organizing the conference [Agricultural Adaptation to Climate Change](#), which you can attend on 13 April at the Brno Exhibition Center as part of the AgriShow trade fair. You can register for the event until **6 April**.

The Centre of Plant Structural and Functional Genomics hosted a training school for the European [HeatDDR](#) project on 26–30 January, organized under the Marie Skłodowska-Curie Actions program. PhD students from a number of European countries learned modern methods for analyzing DNA damage related to heat stress in Olomouc.

News from the IEB

Plant Cultivation Platform

Another **adiabatic cooling** module has been installed in the new B3 greenhouse, so even the largest chamber now has functional environmental control. We also remind you of the possibility of growing *Nicotiana benthamiana*.

The testing phase of the **reservation system** for cultivation rooms will begin in April. It will serve to practice and get feedback so that the full version can be launched later.

If you are interested in receiving **up-to-date information** concerning reservations, pesticide applications, cleaning, or incidents at the Lysolaje facility, you can subscribe to the UEB1-cultivation mailing list.

In collaboration with an expert advisor, we are preparing a short **training session** to review basic practical procedures and ten principles of working in a GMO laboratory in the risk category 1. The session will also include an overview of the import of GMO material into Czechia. The training will also be available in English.

For [more news](#) from the Plant Cultivation Platform, visit the IEB website.



Other news from the institute

The IEB Board approved **capital expenditures** totaling 6.2 million CZK. In addition, the institute received funding from the Czech Academy of Sciences for the purchase of two cultivation boxes, a data storage and management system, and a temperature-controlled orbital shaker.

One of the outputs of the Balanc project is the document **Ten Rules for Smart Work Flexibility** ([available on the intranet](#)). It serves as a guide for modern and effective collaboration while using flexibility and complements the newly established, legally enshrined system for remote work.

Unfortunately, the **planned daycare center** in Lysolaje **will not be built** in the foreseeable future. The project to construct the facility was awarded to the Institute of Chemical Process Fundamentals of the CAS. However, the tender process failed to identify a contractor who would meet the requirements. The project, which was supposed to be completed by the end of July 2026 according to grant rules, thus had to be canceled.

Do you need the **institute's logo** for a poster, presentation, or other use? All versions of the IEB logo are now [available for download in PNG and SVG formats](#) on our website.

The Institute of Chemical Process Fundamentals of the CAS and our institute are looking for a **data steward** (research data manager) for a shared position between both institutes. If you are interested, please apply. Details about the job description and other parameters of this position can be found in the advertisement on [jobs.cz](#).

Are you **organizing a tour of the institute**, an excursion, a workshop, or a similar activity for students or another group of visitors? Please inform [Nikola Siegelmannová](#) so she can add your event to an official list and the institute can report it as a science outreach or educational activity.

New Colleagues

We would like to remind you that Ms. [Adéla Leblová](#) is our new **HR specialist** and Ing. [Ekaterina Gubanova](#) is our new **payroll accountant**.

[Nikola Siegelmannová](#) joined the **Communications and PR Office** in February, taking over Markéta Fílová's responsibilities. At the Prague facility, she is primarily in charge of workshops for schools, organizing public events, and running the young botanist's club.

The Plant Cultivation Platform welcomed a new **gardener**, [Milan Švátora](#), at the beginning of March.

Also joining us in March are José Roberto Torres (postdoc, Centre of Plant Structural and Functional Genomics), Farhdokht Nourisanami (postdoc, Laboratory of Pollen Biology), Ekaterina Krainiukova (research associate, Laboratory of Cell Biology), and Kateřina Šufeislová (research technician, Laboratory of Growth Regulators).

Lucie Maděrková (research associate, Laboratory of Growth Regulators) is returning from **parental leave**.

We wish them all the best in their work and hope they enjoy their time with us.



E. Gubanova



A. Leblová



M. Švátora



N. Siegelmannová

The era of **AI agents for scientific data analysis** is upon us. Those of you who carefully watched M. Liegertová's webinars have already heard about the Kosmos tool from Edison Scientific. However, Kosmos is a) expensive, b) a bit too autonomous :).

However, new tools are emerging that allow users to intervene and consult on the workflow. And most importantly—they are either free or offer trial runs. So, would you like to consult with AI, for example, regarding the **interpretation** of your **RNA-seq (or other -omic)** results? Here are some tips.

[Edison Scientific](#): In addition to Kosmos, they also offer other products. For these, they give registered users 10 tokens (approx. 10 queries) per month for free.

[Biomni Lab](#): Free for now, interactive, a Stanford spin-off.

[BIOS](#): Interactive. After registration, it allows 20 analyses, then you have to pay.

More are being added and will continue to be added, such as [Theorema](#). Try them out and enjoy!

Karel Müller, institute's coordinator for AI

Do you have a question or idea related to AI, have you read an inspiring article, or do you know about an interesting lecture or application?

Then don't hesitate to contact our coordinator (muller@ueb.cas.cz).

Grant Opportunities

- New** The Grant Agency for Research and Innovation IEB CAS ([GAVI](#)) has been established for IEB employees. Its mission is to **launch return grants** supporting researchers in resuming their scientific careers after a career break and preventing their professional disadvantage or departure from research. The GAVI manager is [Vladislava Nádeníčková](#).
- Continuously** A call of [LA GRANTS - GA ČR in the role of a partner organisation](#) with a duration of 2 or 3 years is open. Cooperating agencies are the Austrian Science Fund (**Austria**) and German Research Foundation (**Germany**).
- 31 Mar 2026** Deadline for submission of proposals for [standard projects](#), [return grants](#), and Postdoc Individual Fellowship [Incoming](#) and [Outgoing](#) 2027 projects, with the expected start in 2027, within the **GA ČR** public call. Results will be announced on 26 November 2026.
- 1 Apr 2026** **An internal call for proposals** under the **Academy of the Future 2026** programmes will be launched (allocation approx. CZK 1.4 million). Support is intended for research stays of scientists (including early-career researchers), dissemination of good practice in institutional support for excellence, and returns from career breaks.
- The Project Office will send an e-mail to all researchers with a link to the application form. Applications will be collected from 1 to 12 April 2026, with evaluation completed by 19 April 2026. Subsequent rounds will be launched ca. every 2–3 months. The IEB Board will submit selected proposals to the director, who will decide on their support.
- 7 Apr 2026** Deadline for submission of LA project proposals in cooperation with the [Slovenian agency](#) ARIS, with GA ČR as a partner organisation, and the expected start in 2027.
- 28 Apr 2026** Deadline for submission of LA project proposals in cooperation with the [Luxembourg agency](#) FNR, with GA ČR as a partner organisation, and the expected start in 2027.

For more information, contact Zuzana Hroncová
(B2/223, hroncova@ueb.cas.cz, phone 225 106 802).

Project annotations for Executive Board approval should be sent in advance to the Board secretary Barbora Jindřichová (jindrichova@ueb.cas.cz).

IEB in the Media

The radio program *Káva o čtvrté* on the Český rozhlas Dvojka station has the motto “your daily inspiration”. On 16 January, Jan Rezek from the Laboratory of Plant Biotechnologies was a guest on the show hosted by Patricie Strouhalová. They discussed **plant communication**, a topic our colleague has been researching for many years. You can [listen to the recording](#) in the Czech Radio archive.

The European Union strictly regulates the cultivation of **genetically modified plants**. However, this may soon change. How do older methods of genetic modification differ from the new ones? What specific changes is the EU planning? And what will they mean for scientists, breeders, and farmers? Aleš Pečinka from the genomics center analyzed these issues for an article in the economic newspaper [Hospodářské noviny](#).

In February, the Czech Press Agency reported on two **expert apple tastings**, during which fruits from several dozen varieties were evaluated. Varieties from the IEB breeding station performed exceptionally well, with Lyra and Admiral taking top honors. The report was picked up by several websites in the Deník.cz network, as well as the magazine Zemědělec and its website [zemedelec.cz](#).

Professor Ondřej Novák, head of the Laboratory of Growth Regulators, contributed to the discovery of a new molecular mechanism that regulates **the formation of plant vascular tissues**. The interactions between ribosomes and the compound thermo-spermine, a member of the polyamine group, play a key role. The research was reported on by popular science websites such as [ScienceMag.cz](#) and [VědaVýzkum.cz](#), among others.



*Jan Rezek in the Czech Radio studio
with host Patricie Strouhalová*

Do you have an **article** coming out in a prestigious journal, did you get a major **grant project**, or are you organizing a **scientific event**?

Please inform the Communications and PR Office (komunikace@ueb.cas.cz) and discuss the possibilities for publicity.

Prague

In March, five elementary and high school classes will visit us for the **workshops** we offer to schools. If you know of a school that might be interested in these programs, please contact [Nikola Siegelmannová](#). Information about the workshops (in Czech) is also available [on the IEB website](#).

In addition to warm weather and longer days, spring also brings a number of outreach events in which the institute regularly participates. The highlight will be the [Science Fair](#), which takes place this year on 4–6 July, and the basic concept for our exhibit is already being developed.

If you are interested in participating in this or other science outreach events, or if you would like to share suggestions for topics or activities that could be featured at our booth, please contact the [Communications and PR Office](#).

Day camps for employees' children

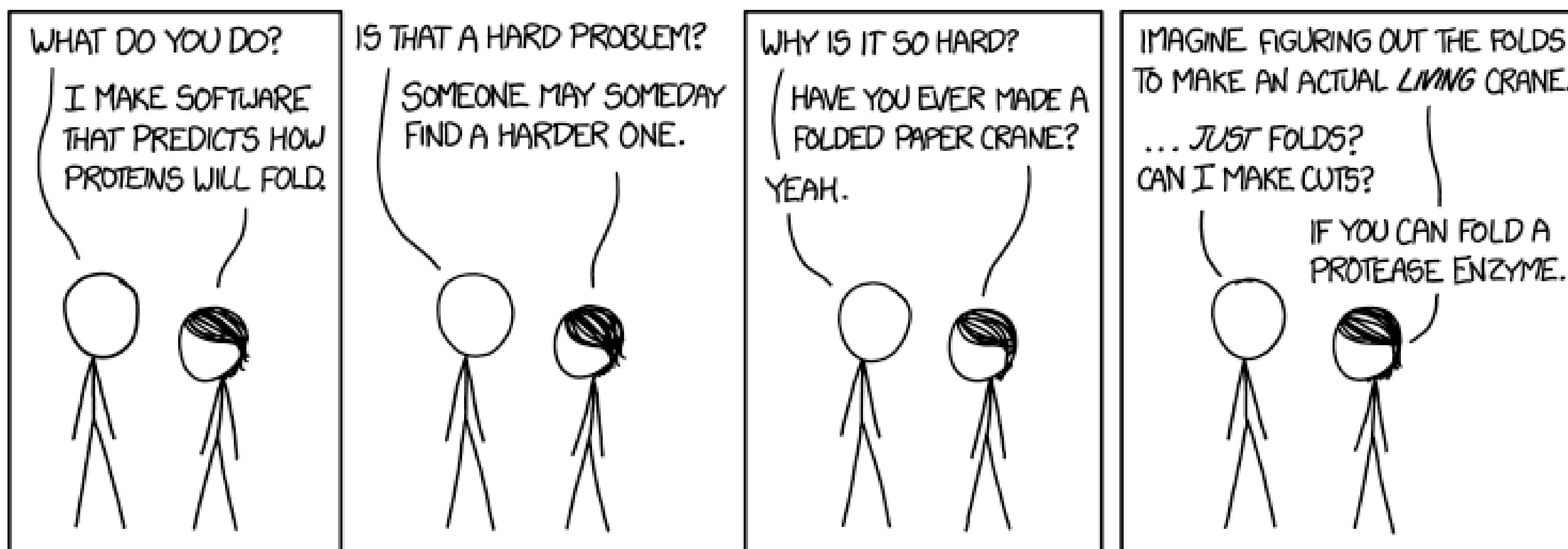
This summer, there will be two sessions of the day camp again, specifically **27–31 July** and **10–14 August**. Through games, experiments, and hands-on activities, children will explore various areas of the natural sciences. More information, including registration details, will be available soon. Please direct any questions about the camps to [Nikola Siegelmannová](#).

Olomouc

The Olomouc team participated for the first time in a joint **blood drive** at the Olomouc University Hospital. In addition to regular donors, first-time donors also took part in the “Donate Yourself with IEB” event. Organizer David Kopecký hopes this activity will become a tradition.

For more information about IEB's outreach events, please contact the Communications and PR Office (komunikace@ueb.cas.cz).

Scientific Humor



Author Randall Munroe, xkcd.com, license CC BY-NC 2.5.

Please send suggestions for other scientific comics (publishable under a Creative Commons license) to the newsletter editor Jan Kolář at kolar@ueb.cas.cz.